



High-end Power Semiconductor Manufacturer

CZZXSD1500C20**Features**

- Low forward voltage drop
- High reverse voltage
- Hermetic metal cases with ceramic insulators

Typical Applications

- All purpose high power rectifier diodes
- High power resistance welding equipment
- Non-controllable and half-controllable rectifiers
- Controlled rectifiers

$I_{F(AV)}$	1500 A
V_{RRM}	1100~2000 V
I_{FSM}	16 kA
I^2t	1386 10³A²S

SYMBOL	CHARACTERISTIC	TEST CONDITIONS		$T_j(^{\circ}C)$	VALUE			UNIT
					Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Double side cooled,	$T_C=55^{\circ}C$	150			1500	A
V_{RRM}	Repetitive peak reverse voltage	tp=10ms		150	1100		2000	V
I_{RRM}	Repetitive peak current	at V_{RRM}		150			36	mA
I_{FSM}	Surge forward current	10ms half sine wave		150			16	kA
I^2t	I^2t for fusing coordination	$V_R=0.6V_{RRM}$					1386	A ² S*10 ³
V_{FO}	Threshold voltage			150			0.83	V
r_F	Forward slope resistance						0.27	mΩ
V_{FM}	Peak forward voltage	$I_{FM}=1500A, F=15kN$		25			1.30	V
t_{rr}	Recovery charge	$I_{FM}=1000A, tp=2000\mu s, di/dt=-20A/\mu s, V_R=50V$		150	9		15	μs
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine double side cooled					0.073	°C /W
$R_{th(c-h)}$	Thermal resistance case to heat sink	Clamping force 15.0kN					0.021	
F_m	Mounting force				14		15	kN
T_{stg}	Stored temperature				-40		150	°C
W_t	Weight				151		157	g
Outline	ZT40AT							

DIMENSIONS in millimeters (inches)

3.5 (0.14) DIA. NOM. x
1.8 (0.07) deep MIN. both ends

